



# Investigating Personality Constructs in Etiology of Criminal Behaviors

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## ABSTRACT

The present research aims to investigate personality constructs in etiology of criminal behaviors. This descriptive study was conducted on 200 students of Tehran Medical Science University (100 female students and 100 male students) in 2018-2019. Subjects, accessible, were selected with stratified sampling method and they participated in the research voluntarily. In the research two questionnaires were used for gathering data namely, Neo and Criminal Behaviors. The data were analyzed with Pearson correlation, simultaneous regression and stepwise regression. The data indicated that: neuroticism personality trait ( $r=-0/45$ ), agreement ( $r=-0/63$ ), agreement ( $r=-63$ ) and loyalty ( $r=-0/69$ ) with significant negative relationship ( $p=0/01$ ) and extraversion traits ( $r=0/78$ ) and open to experience ( $r=0/71$ ) with significant positive relationship ( $p=0/01$ ): the results of linear and hierarchy regression showed that generally these personality traits explain 75% of criminal behaviors variance which extraversion 60%, loyalty 8%, neuroticism 4%, open to experience 1% and agreement 2%. The results indicated that findings of this research can apply to create intervening programs for the ones engaging in criminal behaviors and also preventing this behavior for the ones who are exposed to such behaviors.

**KEYWORDS:** personality constructs, criminal behaviors, students

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## I. INTRODUCTION

One of the abstruse and saddening matters that drew the attention of many psychologists, sociologists and criminologists is the matter of the felonious youths which is increasing day by day. There's not a single day without a report on media about youths' crimes. Despite the improvement in living conditions in terms of cultural and social development, as well as the development and expansion of centers and institutions of psychological services, the crime rates of juvenile delinquency have become stingy. There are many

possible reasons for this disastrous social phenomenon that can be identified as a set of biological, psychological, social and cultural factors. (Schumacher, 2015. Ibarra Ghavam, 2010).

From a legal point of view, criminal behavior is usually defined as activities prohibited by law and punishable by fines or arrest and imprisonment, including such as murder, theft, rape, driving while drunk, and .... The key to understanding criminal behaviors is to focus on the basic and common characteristics of these behaviors, not to the specific types of criminal activity; in other

words, all criminal behavior are recognized through a number of important and fundamental features, including the use of force, deception, possession Self-centered behavior is self-control and impulsiveness (Gottfredson and Hirschi, 2010). Several studies have shown that, variables such as being male, being young, poverty, a broken family and inappropriate socialization are positively correlated with a criminal behavior (Land et al., 2005).

Many scholars and the general public argue that there are individual differences in intelligence, personality or other factors that distinguish not only young offenders from other young people, but also directly and indirectly the cause of their delinquency. These ideas can be summarized in psychological theories. Psychology is very broad and involves different orientations and approaches in understanding the behavioral, emotional, psychosocial and cognitive characteristics of humans, or in other words, human personality. One of the most important psychological views is the psychoanalytic approach. Although this approach originally emerged from the radical and influential teachings of Freud's Sigmund, but he and his followers set out a different orientation that could lead to different scholarly explanations of delinquency.

The main presupposition of the psychoanalytic view of delinquency is that behavioral and psychological abnormalities occur with the emergence of conflicts in the years of childhood and during the process of the development of human personality, which are generally due to the contrast between innate and intrinsic needs and moral and social limitations. Therefore, to escape from these conflicts, the individual throws themselves into the unconscious part of mind so as to avoid the unpleasant consequences of the anxiety caused by the problems, which is one of the main ways of controlling the personality conflicts of defense mechanisms.

The results of some studies indicate that personality traits are important predictors of behavioral problems, delinquency and criminal behaviors. Most of the research in this area focuses on specific personality constructs, such as sensation seeking, along with broad personality constructs in the emergence of criminal behaviors. In fact, sensation seeking is one of the most important factors that affect people's willingness to commit criminal and high-risk behaviors. Sensation seeking is a structure that first proposed by Eisenck as one of the extraversion's personality

structures, and then Zuckerman developed it. Sensation seeking is defined as the need for diverse, new and complex experiences and excitements, as well as the desire to accept physical and social hazards to achieve such experiences.

Considering the important role of personality constructs in creating abnormal personality patterns and their role in the emergence or continuation of delinquent behaviors, in this research, our effort will be to introduce, analyze and examine all aspects of personality constructs And their relation with criminal behaviors. The purpose of the present study is to investigate personality constructs in etiology of criminal behaviors.

## II. REVIEW OF LITERATURE

Relations of personality construct a scale of performance with criminal behaviors The convict leads his guilt to another one meaning they understand and believe that all people have problems with them; therefore, in order to defend himself, it is conceivable to him that his soul defines its work as a victim of others, and the other persons, namely those who have been harmed and hurt. His emotions create such misconceptions, so he thinks about defending himself and attacking others (Prosecutor, 2003). With the help of this personality trait, the person attributes to others the motives, behaviors, states and attributes that he does not like and hates them and wants to reject them (Karimi, 2013).

Some types of crimes are committed by the help of other people. These mechanisms, which are similar to psychoneurosis mechanisms, cause the person to commit an unreasonable practice, the wrong practice, is more or less appropriate for an unpleasant act desirable for the ignorant mind. These personality traits include: displacing personality, baseless imagination and symbolism character (Jawad Zadeh, 2014). These personality constructs are like psychoneurosis mechanisms, because both types act in order to relieve emotional excitement. A relieve means a kind of satisfaction of instinctive desires that are transfigured and hidden from the consciousness of the soul. In fact, such crimes represent the situations between deliberate and psychological misconduct, and psychoneurosis, especially mandatory psychoneurosis. When such perpetrators are asked to explain why they were abusive and aggressive, they say they have been guilty of an irresistible motive for committing a crime and they



do not know why they have done it, but insist that such actions are different with their personality. And they are right to think so, because they do not know any conscious motive for their actions. In these cases, the soul tries to find a valid reason for its action, and this effort is not merely due to the conviction of the judge, but because the accused soul asks them to give explanations. The soul does not want to make itself a gamble of its instincts. His pride requires him to make a kind of explanation and to pretend that his conscious personality is governed by his instinctive stretch. Another personality attribute that is considered in the investigation of criminal behavior is the return character or throw back., If the vital force faces obstacles and couldn't pass through them, or if the satisfaction of needs and compromise is not possible with the environment, the person comes back from the social barriers and traditions, and by the refluxes he notices the previous stages of life. The childish acts conducted by adult people represent their return to the world of childhood and the consequences of failures that appear crude. In the mechanism throw back, the whole personality of a person does not retreat to one step in the previous stages, but some emotional, thinking and behavioral aspects may be subject to change and the rest of the personality aspects continue to progress in other stages of the evolution. Therefore, one may think that his thinking is like an adult, while his behavior is childish, a child who nags, attacks, takes away and does so many wrong things (Schultz, 2013. Seyyed Mohammadi, 2013).

Some people seem to be more prone to do a felony in terms of personality factors. The character can be defined as a lasting and amazing set of features that may vary in different situations. Although there is still controversy over the basic structure of personality traits, but most personality's researchers now accept the five-factor model. It was thought in the 1950s that family life, education, conflicting feelings, physical and sexual abuse records, and the weaknesses in parental supervision were directly related with crime and the possibility of committing crime (Gudjohnsen, Hans Eysenck 1989).

Searching for a particular personality type or behavioral characteristic has long been occupying the academics' minds and the scientific community (Kaspi et al., 1994). This is partly evolving from the stubborn opposition and stubborn denial of the notion that ordinary people can commit crimes such as rape, murder or child abuse. (Barlow

1990). Another reason is that humanity has great desire to hear a simple and straightforward answer to any question (Bartol, 1991).

In spite of the constant popularity of personality theory, criminologists have always doubted the association of crime with the personality of the perpetrators. (Andrews and Vermit, 1989; Brown, 2006; Kaspi et al. 1994; Gibbons 1989).

In general, the theorists of character try to put together different pieces of the human personality puzzle. Mood is the term used for the dimension of the personality that accompanies you from childhood (Farlington and Liff 2004). Personality traits form the emotional and empirical layers of life, and shape the individual's perception of the current condition and worldview, and through these physical and emotional reactions shape them to actions and different situations (Roberts 2009).

Personality and criminology have always been linked in various current types of views and perspectives in two ways. First, in the context of relationships in psychology of behavioral-personality (Ickers and Sellers, 2009), specific behaviors and personality characteristics may be linked in a structural models of personality to antisocial behavior (ASB). According to Miller and Linam (2001), there are four structural models in case of personality that are widely used in criminological research and are valid: the Five-factor model (Costa and McCarey), the PEN model (Eysenck 1977), the Three-Factor Tellegen (1985) and the Cloninger Personality Model (1993) are a number of these models.

#### **Five constructs and main factors are as follows: Neuroticism, Extraversion, and Open to Experience, Agreeableness and Conscientiousness**

Neuroticism is the tendency to experience negative emotions such as anxiety and depression; extraversion is the tendency to socialize, being affable, to dare, to seek stimulation, to be active and to be happy; to be open to experience, the desire for imagination, creativity, emotional and artistic sensitivity, and being unconventional; An interpersonal agreement is a relation which are characterized by altruism, trust, humility, and cooperation, and is loyalty, desire for order, progressivism, insistence and reliability, and observance of rules and ethics (Haghshenas, 2006).

#### **Investigate the relationship between personality structures in contemporary psychological approaches and criminal behavior (self-object relationship)**

The individual transforms themselves into whatever else he would like to be, in order to protect themselves from problematic emotions, especially the fear of losing a beloved person. The association of this personality feature with delinquency in youths, who get affiliated to the groups of the delinquent and extremist and at the same time face the identity confusion, as well as a lack of a valid educational system occur, and these individuals will turn to indistinctiveness (Blackman, Javadzadeh, 2014).

### **Desertification**

One does not consider other people as a living thing and a human being. Therefore, they do not have to worry about trusting or having inhuman encounters with them. Many of the perpetrators and criminals in relation to other humans and the sufferings they impose on others for their acts use the defensive mechanism of desertification. These people regard them as lacking in human dignity.

Eysenck believes that in the combination of environmental conditions and neurological and personality factors some characters are more susceptible to crime than others. Contrary to most contemporary theories, Eysenck's theory emphasizes genetic talent for criminal behavior and ultimately antisocial behavior. Eysenck did not believe that the convict are born criminal, but believed that some people are born with a specific nervous system that has a significant difference with the majority of the community. According to Eysenck, personality is the main factor in criminal behavior; it has a determining role in creation of crime and studying it is the only systematic method for explaining criminal behavior.

Based on a series of empirical studies, Eysenck proved that there are three main factors called extraversion, neuroticism, psychoticism in personality. Also, Eysenck believed that intelligence was an important factor in crime's causation but was less important than personality factors. According to Eysenck, the extraverted type is social, shocking, optimistic and emotional, and changes rapidly with environmental changes. Extraverts lose their temper quickly and get easily furious and aggressive, and are unstable. On the contrary, Introversion type is cautious, silent and calm. Introverts control their feelings and emotions, avoiding emotional activities, changes, and most social activities. Introverts are calm and not aggressive and have a high value for moral norms. Neurotics will have a hard and violent personality due to the pressure of internal and

external needs, and they are difficult to acclimate with the environment. According to Eysenck, the behavior of psychotic is very similar to those of antisocial people. Generally, the characteristics of these individuals include coldness, mercilessness, social insensitivity, disregard for risks, hatred of others, and abnormal behaviors.

Eysenck showed that those who are extraverts require higher levels of environmental stimuli, which are the result of their nervous system's biological structure. Because extraverts need a lot of excitement and irritability, and they get bored too soon, therefore they are more likely to act against the law and the community. Also, neuroticism is considered to be a major cause of crime in adults. In general, Eysenck's theory that convicted people and anti-social individuals are gaining a higher score in the extraversion scale has been emphasized (1975).

In the literature review, few studies have investigated the relationship between risk taking and personality factors based on the Neo Five Factor Model. In one of these studies, Nilson and colleagues investigated a sample of 2401 students and manager attending undergraduate courses at a local university. Comparing the average overall risk score showed that women were less prone to risk than men. The relation between extraversion and openness was positive with risk, while neuroticism, agreement, and loyalty had an inverse relationship with risk. These relationships were true in all areas, except for the danger in the area of health in which neuroticism had a positive relationship with risk. In this study, it was also found that the seeking for sensation of the extraversion factor has the highest relation with overall risk. Targorsen also found in a research: Those who scored high in neuroticism and scored lower in loyalty; they were most likely to commit Multiple risk behaviors. Those who earned a high score in loyalty and scored the lowest in extraversion they had least likelihood of committing criminal behavior. Anis concluded: That in adult people, high scores in openness to experience and low scores in neuroticism and agreement are correlated with the overall risk score. After categorizing individuals in terms of gender, only openness to experience had a significant relationship with risk taking. Although there were gender differences between men and women, none was statistically significant.



### III. METHODOLOGY

The research method is cross-sectional descriptive and correlational. The statistical population of the study consisted of all male and female undergraduate students of Tehran University of Medical Sciences who studied in the first half of the academic year 2018-2019.

According to the proportion of students in each faculty of the university to the total number of students, as well as considering the ratio of girls and boys in each college to its proportion in society, 200 people (100 female students and 100 male students), being accessible, were selected by stratified sampling method. The sample size was calculated based on the sample size formula in correlational studies  $N = Z^2 P (1-P) / d^2$ , in which  $\alpha = 0.05$ ,  $d = 0.07$  and  $p = 0.5$  were considered based on the attribute of criminal behavior. Having run by chancellor and obtaining permission to distribute the questionnaire and conduct the research and after getting the students involved and justifying them about the research goals, necessary information was provided to them to complete the questionnaires. The related scale of the personality questionnaire of NEO, is one of the the comprehensive tests that measures the five main aspects or region of the personality and the characteristics associated with these aspects. These five main aspects that are examined in the five test indicators provide a comprehensive review of the personality of the adult population. The Neo test has 240 entries that respond to them on a 5-point scale. This test was presented by Costa and McCrae in 1985.

Indicators of this test are the expansion and refinement of a combination of verbal logic and factor analysis methods, and the findings of nearly 15 years have been extensively studied on clinical samples and samples from normal adult people. The reliability coefficients of the main indicators of this test, namely, neuroticism, extraversion, openness to pleasure and loyalty in Iran were 0.83, 0.75, 0.80, 0.79, and 0.79 respectively. Content validity is expressed with the concept that for each personality factor, six adjectives are considered, and each attribute is evaluated with its own questions. The criterion validity of the group means the efficiency indicators of the test and the prediction of the individual's behavior in a specific situation. To do so, the individual's performance is compared with a criterion. For example, psychiatric patients are expected to get a high score in neuroticism; such cases can provide evidence for the validity of the test (Garousi, 2000).

### Risky behaviors questionnaire, first developed by Kamel-Abbasi and Sargolzari.

It's a 40 question questionnaire and evaluates criminal behaviors in various areas including safety, violence, suicide, smoking, alcohol intake, the use of illegal drugs, high-risk sexual behaviors, nutrition, and physical activity. The questionnaire is ranked based on a five-point scale (zero to four). Initially, the subject is given a "yes / no" indication of whether he / she behaves the same way. If they marked NO, the score will be zero, but if the choice of yes is chosen, it should also indicate the intensity of the behavior, which, in terms of the intensity of the behavior, very high score is indicated by 4, high is indicated by 3, low is indicated by 2, and very low is indicated by 1 which is in fact scored as Likert, with a maximum score of 160. Cronbach's validity coefficient was 0.80. Using Cronbach's alpha, the reliability coefficient of this test in the present study was 0.75. In order to analyze the data, SPSS software and Pearson correlation test, simultaneous regression analysis and stepwise regression analysis were used.  $P = 0/05$  is considered.

### Research Hypotheses

In this study, the following assumptions are tested:

**Hypothesis 1:** There is a negative and significant relationship between neuroticism and criminal behaviors.

**Hypothesis 2:** There is a negative and significant relationship between agreement construct and criminal behavior.

**Hypothesis 3:** There is a negative and significant relationship between the loyalty construct and criminal behavior.

**Hypothesis 4:** There is a positive and significant relationship between openness to experience and criminal behaviors.

**Hypothesis 5:** There is a positive and significant relationship between extraversion construct and criminal behaviors.

### Results

In Table 1, the results of Pearson correlation coefficient showed that among all of the students, female students as well as male students, personality characteristics of neuroticism, agreement and loyalty had a significant negative relationship with criminal behavior and personality characteristics of openness to experience and extraversion have a significant positive relationship with criminal behavior. Among all of the students, female students and male students, extraversion

has the highest correlation coefficient with criminal behavior. and neuroticism has the lowest correlation

Male & Female Students			
Male Students	Female Students	All of Students	Neuroticism
-0/51**	-0/31**	-/043	
0/85**	0/71**	0/78	Extraversion
0/84**	0/64**	0/71**	
-0/65**	-0/58**	-0/63	Openness to Experience
			Agreement
-0/72**	-0/67**	-/69	Loyalty

The results of simultaneous regression analysis for all students show that the regression coefficient of all predictive variables is 0.86 and significant. Also, by calculating the coefficient of determination, it can be seen that with the input of all predictor variables, 0.75 of the changes in criminal behavior can be explained in all students. Simultaneous regression coefficient of all predictive variables for female students is 0.85 and significant and its coefficient of determination shows that with entering all predictive variables, 0.73 of changes in criminal behaviors can be explained in female students. Regression coefficient the personality

characteristic of agreement is not significant in female students. Simultaneous regression coefficient of all predictor variables for male students is 0/09 and significant. And the coefficient of determination shows that with the inclusion of all predictor variables, 0.81 of the changes in criminal behavior can be explained in male students. As seen in Table 2. Regression of personality characteristics of agreement and loyalty in male students is not significant

**Table2.** Calculation of outcome coefficient from the simultaneous regression analysis of criminal behaviors in all the student, Female students and Male students according to the input variables

Male Students Standard Error B	Female Students Standard Error B	All students Standard Error B	
0/38	0/38	-0/29	Neuroticism
0/38	0/29	0/28	Extraversion
0/50	0/24	0/26	Openness to Experience
0/45	0/28	0/26	Agreement
0/45	0/26	0/27	Loyalty

The results of stepwise regression in terms of predictor variables indicate that respectively externalization, loyalty, neuroticism, agreement, and openness to experience are the most related with the criminal behaviors of all the students. In fact, the contribution part of the NEO personality

traits in criminal behaviors in all of the students is as follows:

According to Table 3: Extraversion 0/60, Loyalty8%, Neuroticism 4%, Openness to Experience and Agreement 2%.

**Table 3** Calculation of stepwise regression analysis of predictive variables and its relationship with criminal behaviors for all the students.

Coefficient of Determination	P-Value	Beta	Standard Error B	Coefficient B	Regression steps
0/60	0/000	0/78	0/21	3/81	Extraversion

0/68	0/000	0/35	0/24	-1/70	Loyalty
0/72	0/000	-/20	0/29	-1/55	Neuroticism
0/73	0/002	0/17	0/26	0/82	Openness to Experience
0/75	0/003	-0/15	0/26	-0/81	Agreement

In Table 4, the personality characteristics of female students were entered into the equation based on the Beta score obtained from their simultaneous regression. Therefore, the agreement personality characteristic, which was not significant in Beta coefficient, was eliminated from the regression equation. The results of stepwise regression analysis according to predictor variables indicate that extraversion, loyalty, openness to

experience and neuroticism are the most correlated with criminal behaviors in female students. The contribution of Neo's personality characteristics in criminal behaviors in female students is as follows: extraversion 0/51, loyalty 0.16, and openness to experience 4%, and neuroticism 1%.

**Table4.** Calculation of stepwise regression of predictor variables and its relationship with criminal behaviors for all Female students

Coefficient of Determination	P-Value	Beta	Standard Error B	B Coefficient	Regression Steps
0/51	0/000	0/71	0/30	3/7	Extraversion
0/67	0/000	0/44	0/24	-1/70	Loyalty
0/72	0/02	-0/13	0/38	-0/91	Neuroticism
0/71	0/001	0/23	0/25	0/82	Openness to Experience

Regarding the fact that in simultaneous regression analysis, only regression coefficient of three variables namely extraversion, openness to experience and neuroticism was significant for Male students, in the stepwise regression analysis, these three variables were entered in the equation based on the Beta score,. The results of stepwise regression analysis in terms of predictor variables

indicate that respectively extraversion variables, openness to experience and neuroticism have the highest relationship with criminal behaviors for male students. The contribution of Neo's personality traits to criminal behavior in male students is as follows: 0.73 extraversion, openness to experience of 4%, and neuroticism 2%.

**Table5.** Calculation of stepwise regression of predictor variables and its relationship with criminal behaviors for all Male students

Coefficient of Determination	P-Value	Beta	Standard Error B	B Coefficient	Regression steps
0/73	0/000	0/85	0/26	4/38	Extraversion
0/79	0/01	-0/17	0/38	-1/31	Neuroticism
0/77	0/000	0/41	0/51	2/25	Openness to Experience



#### IV. DISCUSSION AND CONCLUSION.

The purpose of this study was to investigate personality constructsetiology of criminal behaviors. The results of this study showed that the personality traits of neuroticism, loyalty, agreement to criminal behaviors in female and male and all students were significantly negative. Also, personality characteristics of extraversion and openness to experience with criminal behaviors in female and male and all the students were positively significant. Additionally, after extraversion, loyalty, neuroticism, agreement, and then openness to experience respectively had the most relationship with criminal behaviors in all the students, in that by increasing extraversion, openness to experience, the amount of criminal behaviors is increased, and by increasing neuroticism and agreement the level of criminal behavior decreases. Neuroticism with criminal behavior showed a significant negative relationship between male and female students and all students. This relationship was also significant by using simultaneous and stepwise regression analysis. This conclusion is compatible with the findings of Nilsson et al. (2010), but is not compatible with the findings of Valarasstudies (2012). There was a significant positive relationship between personality characteristics of extraversion and criminal behaviors in male and female students and all students. The results of simultaneous and stepwise regression analysis showed that extraversion is a significant predictor of criminal behavior. This finding is consistent with the results of Nilsson et al. The personality trait of openness to experience with criminal behaviors was significantly positive in female and male and all the students. The results of simultaneous and stepwise regression analysis showed that this feature has the ability to predict criminal behaviors. There was a significant negative correlation between personality traits of agreement and criminal behaviors in female students, male students and all students. But the results of simultaneous and stepwise regression analysis showed that agreement was only a significant predictor of criminal behavior in all of the students, and that male and female students, by gender, could not predict criminal behavior. The result of the relationship between agreement and criminal behaviors in female and male and all students is consistent with the results of Nilsson et al. (2010). Characteristic personality traits of loyalty were significantly negative with criminal behavior in

female students, male students and all students. However, the results of simultaneous and stepwise regression analysis showed that loyalty were only significant predictor of criminal behavior in female students and all studentsand does not have the ability to predict criminal behaviors in male students. This result is in the context of the relationship between loyalty and criminal behaviors among all students confirming the findings of Nilsson et al. Loyal persons hardly get involved in criminal behaviors due to the presence of features such as the ability to control impulses and tendencies, the use of a plan in their behavior to achieve goals, a high score in professional and academic fields, precision and caution, flexibility, punctuality and reliability. The results of this study showed that there is a significant relationship between personality traits and committing criminal behaviors. Therefore, considering these results to prevent the spread of criminal behavior among students and educated young generation, it is suggested that parents and educators' awareness of educational issues and factors influencing the formation of their children's character, especially in childhood be improved, so that they consciously prevent the formation of personality traits that influence the attitude of high-risk behaviors and develop characteristics in their children that help them to cope with these behaviors. On the other hand, empowering young people about life skills, especially self-awareness skills, stress management, emotional management, problem solving and decision-making can play a significant role in reducing interpersonal problems, aggression, violence, disappointment, Self-injurious behaviors and dangerous behaviors. Preparing and setting educational brochures in universities and social-cultural institutions in the area of criminal behavior and factors affecting them will also have a significant impact on preventing an increase in the frequency of these behaviors in students. Given that high risk behaviors in male students are more than female students, preventive interventions need to be addressed more seriously.

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